

BRANDON LAZARD

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[BRANDONJLAZARD.GITHUB.IO](https://github.com/BRANDONJLAZARD)

EMAIL: BJLAZARD@G.UCLA.EDU

EDUCATION

University of California Los Angeles

June 2023-present

Ph.D. in Geophysics and Space Physics

Cumulative GPA: X.XX

University of Texas at Austin

May 2023

Bachelor of Science in Physics

Bachelor of Science in Astronomy

Cumulative GPA: 3.77

SCHOLARSHIPS AND AWARDS

Nancy Francis and William McMinn Endowed Presidential Scholarship

2021-2022

UT Austin Department of Astronomy Board of Visitors Scholarship

2021-2022

RESEARCH EXPERIENCE

Dr. Wang's Lab, Department of Mechanical Engineering, UT Austin Jan 2021-Aug 2021

Project: Modeling Microhollow Cathode Discharge Devices

- Produce computational model to analyze plasma discharges in microhollow cathode devices
- Construct experiment to reproduce simulation results

Dr. Tenerani's Lab, Department of Physics, UT Austin

Aug 2021-April 2023

Project: Analysis of Solar Wind Turbulence and Compressibility Using NASA's Wind and Parker Solar Probe Data

- Write Python3 scripts to analyze NASA Wind and Parker Solar Probe data
- Create catalog of density and magnetic field parameters of the solar wind using NASA Wind and Parker Solar Probe data

EMPLOYMENT

Physics Office Lab Demonstrator, UT Austin Physics Department

Sep 2021-April 2023

- Setup physics demonstrations for introductory physics classes (e.g., mechanics, electricity and magnetism, thermodynamics, and waves)
- Repair and upgrade physics demonstrations
- Train new hires on various physics demonstrations

CONFERENCE AND POSTER PRESENTATIONS

Conference Posters

- **Lazard, B.** Tenerani, A. & Gonzalez, C., "Analysis of Solar Wind Compressibility using NASA Wind and Parker Solar Probe Measurements". Presented in the Triennial Earth-Sun Summit (TESS). Seattle, 2022.

Undergraduate Posters

- **Lazard, B.** Tenerani, A. & Gonzalez, C., “Analysis of Solar Wind Turbulence using NASA Wind Measurements”. Presented in the College of Natural Science’s Research Forum. UT Austin, 2022.

ORAL PRESENTATIONS

Public Outreach

- Schrodinger’s Pint, Darwin’s Piano Bar, April 2022: “The Mysteries of the Sun”

CAMPUS INVOLVEMENT

Astronomy Students Association

Oct 2021-present

Co-President (2021-2023)

- Planned meetings, arrange for speakers inside and outside of the department, arrange semester camping trip, engage in outreach to the Austin and greater Austin school districts

Astronomy Mentorship Program (AMP)

Aug 2022-present

Co-Founder and Mentor (2022-2023)

- Mentor undergraduate astronomy students on research opportunities, career goals, and schedule planning
- Coordinate with the graduate astronomy mentorship program to better both programs and their mentees.

PROFESSIONAL SKILLS

Programming

- Programming experience with Python3
- Experience with Mac OSX/Linux operating system
- Experience with LaTeX for writing scientific papers
- Experience in OpenFoam
- Experience in using NASA’s CDAWeb
- Experience in cadding with SolidWorks
- Experience in cadding with Fusion360

Certifications and Laboratory Training

- Machine Shop Certification (lathes, mills, desktop CNC mill)
- Laser safety training
- Cryogenic safety training

Telescope Experience

- McDonald Observatory
 - 3 nights on 2.1 m
 - 1 night on 0.9 m

REFERENCES

Dr. Jonathan Aurnou,

Department of Earth, Planetary, and Space Physics

University of California Los Angeles
Email: jona@epss.ucla.edu

Dr. Anna Tenerani,
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University of Texas at Austin
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Dr. Aida Torabi,
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